

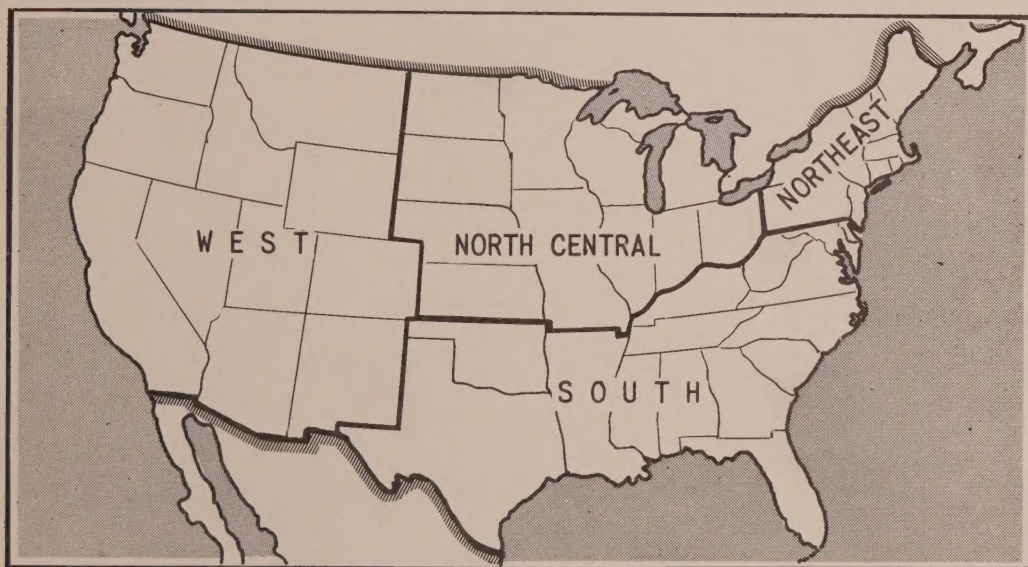
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FISH AND SHELLFISH PREFERENCES OF HOUSEHOLD CONSUMERS - 1951

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PART II - Regional Summary



FISHERY LEAFLET 408
FISH AND WILDLIFE SERVICE

United States Department of the Interior



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FISH AND SHELLFISH
PREFERENCES OF HOUSEHOLD
CONSUMERS-1951 1/

Part II - Regional Summary

By Walter H. Stolting* and Morton J. Garfield**

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1/ Based on interviews conducted by the firm of Alfred Politz Research, Inc., New York, N. Y., under contract with the Fish and Wildlife Service.

* Chief) Economics and Cooperative
** Economist) Marketing Section, Branch
of Commercial Fisheries

INTRODUCTION

This is the second in a series of reports resulting from a Nation-wide survey of fish and shellfish preferences of household consumers, conducted under the auspices of the Fish and Wildlife Service in October 1951. Of 2,473 persons questioned concerning their individual households, 2,335, or 94.4 percent, indicated that their households consumed some kind of fishery product, and only 138, or 5.6 percent, indicated that their households consumed no fishery product of any kind. Many of the latter were small one - or two-person households. It is interesting to note the high percentage of the population of the United States which used fishery products (regardless of volume) during the twelve months preceding the survey.

In those households where fish and shellfish were used in some form, questions in detail were asked about consumption of fish and shellfish, particularly frozen fish and shellfish. The questionnaire stressed the latter items because of the more pressing need for market expansion of these products and the trend in that direction. The frozen fish and shellfish producing segment of the fishery industries is plagued with problems of heavy imports, occasional oversupply, misjudging of market demand, etc. Increased consumption offers a solution at least in part to these problems as well as a contribution to the well-being of consumers. It is in this spirit that the survey was undertaken. However, the survey contains information of value to all segments of the domestic fishery industries concerned with increasing fish and shellfish consumption in the United States.

This report summarizes the information obtained from the survey on a regional basis for the four regions into which the sample has been divided, namely, Northeast, North Central, South and West. A map containing the regional boundaries is given in Figure 1 on page 3.

Fishery Leaflet 407 entitled, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary, has been issued previously. Further reports summarizing tabulations by farm and non-farm responses, income, etc., will be made under subsequent fishery leaflet numbers. All of the material in these fishery leaflets will be combined later into a final report. This report, in addition, will give more detailed information as to survey methods, characteristics, etc. than is shown below.

REGIONAL BOUNDARIES FOR REGIONS COVERED IN THIS SURVEY



Fig. 1

SURVEY METHODS AND CHARACTERISTICS

A copy of the questionnaire which was used in the survey is reproduced in the appendix. The persons questioned, mostly housewives, were selected by accepted area-sampling methods to represent the entire population of the country. A stratified random sample was used. The stratification of the sample was based on criteria available from previous censuses and surveys. Data on population by metropolitan areas, non-metropolitan counties and geographic regions, density of population, percent of persons engaged in agriculture, percent of homes with mechanical refrigeration, and percent of women in the labor force, conditioned the selection of the sample. In connection with the probability aspects of the sample, the established two standard errors, which are widely used in measuring the accuracy of the results in this type of survey, indicate the range of error for estimates made from the national sample or regional samples to be within relatively narrow limits.

The following table shows the range of error for estimates based upon the national sample of 2,473 respondents.

Approximate Sampling Tolerances
(at the 19 in 20 probability level)

	Size of Tabulated Percentage				
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
Portion of the sample from which percentage is derived					
Base - 100% (entire sample)	2.5	3.4	3.8	4.1	4.2
Base - 50% of sample	2.9	3.9	4.5	4.8	5.0
Base - 10% of sample	4.0	5.1	6.0	6.3	6.5

The table may be applied to the data shown in the U. S. Total column in the summaries beginning on page 11 herein. It shows, for example, that the chances are 19 in 20 that a reported figure of 80 percent which is based on the total interviews will be within plus or minus 3.4 percentage points of the true value (the value which would be obtained by taking a complete census of the population). If this 80 percent were derived not from the entire sample, but some group constituting only one-half of the sample, the tolerance would be 3.9 percentage points.

For the first four columns in each summary which give the data for respective regions a slightly higher range of error will apply than that shown in the table above for the national sample. The figures on the range of error for regional data may be computed from a simple formula. The formula and the error data for estimates within a region are available with the worksheets for this project. For all practical purposes the error limits are relatively small except for a few of the summaries which are marked with a footnote to indicate that care must be exercised in interpreting the data given in those summaries. They are shown only to indicate trends or general tendencies with respect to the problems which gave rise to the questions with which these particular summaries are concerned.

The characteristics of the sample obtained in this survey are given following the pages herein which give the answers to the survey questions. For each characteristic five columns are shown, one for each of the four regions and a fifth column which sums the regional figures into the national total. The latter was given in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary. In some instances the data given in that leaflet for these characteristics have been revised. Where this occurs, the revisions are indicated by an asterisk. Some of these characteristics can be compared to available census and survey data and others cannot since they do not represent the same concepts. Some of the more important characteristics are comparable and show similarities to available check data.

The tabulations of the replies to the questionnaire on a regional basis are given on pages 11 to 59. Like the characteristic (classification) data these summaries contain five columns, one for each of the four regions and a fifth to show the national totals of the replies. The national totals were also shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary. Some of the national totals shown in that leaflet have been revised and in the same manner as the characteristic (classification) data, such revisions are indicated by an asterisk.

The summaries of the replies for each question analyzed are given in percentages of the "number asked" or "number of answers" shown at the bottom of the tabulation. The percentages in each column are based only on the figure given at the bottom of the respective column and therefore can be summed and checked only by individual columns.

Because of their nature, some of the questions were asked only part of the total number of respondents in a region or nationally and the summaries are made accordingly. For most questions the number of respondents asked the particular question is given at the end of a summary or in footnotes thereto. The summaries for some questions had to be made on the basis of number of answers given since some respondents gave more than one reason in reply to a question. For the majority of the summaries which are based on the number of respondents asked each percentage in a particular summary may be applied to the total number of households in the region or in the United States, depending on the column from which it is taken, and may be considered an estimate of the reaction of that group of the population, subject to the range of error described previously. When the answers to the questions are desired on a unit basis rather than percentages, simply apply the percentages to the figure given under "number asked" or "number of answers" at the end of each summary.

MAJOR FINDINGS

There are many interesting points which may be noted with respect to household consumer preferences for fish and shellfish. Subject to the range of error referred to in the previous section, the following estimates are made of the percentage of households--within a region and for the United States as a whole--which used various types of fishery products during the period of one year preceding October 1951. The percentages are based respectively on the following totals of the number of respondents for each area and for the United States; Northeast 685, North Central 732, South 734, West 322, and United States 2,473.

<u>Product</u>	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Fish:					
Frozen	51.8	62.2	42.9	51.9	52.2
Fresh	76.4	62.7	71.0	71.1	70.0
Canned	79.4	79.9	71.5	83.2	77.7
Cured	29.1	21.0	9.9	23.3	20.3
Shellfish:					
Frozen	19.4	22.7	14.3	23.6	19.4
Fresh	35.5	18.4	24.7	27.6	26.2
Canned	29.8	17.2	10.8	29.8	20.4

The findings in the national summary to the effect that most households do not associate a particular season with more=frequent serving of fresh or frozen fish or shellfish have been found to apply similarly in each region. For the nation as a whole and in three of the regions, North Central, South, and West, most of the respondents do not associate a particular day with the serving of these products. In the Northeast area for all of these categories of products, except fresh shellfish, a majority of respondents indicated that they served them on Friday. This is the only area where Friday is particularly indicated to be a "fish day". In this connection, it is interesting to note that there is a correspondence between the data on day of the week served and the data on the religion of the respondents which is shown on page 59 .

The survey indicates that most people can generally get the kind of fresh or frozen fish or shellfish they want. Instances where respondents indicated that they could not get a particular fishery product which they desired were in the minority. The distribution system for these fishery products as presently constituted seems to operate effectively. It may be that inertia and close familiarity with the present distribution system are the reasons for this. Although the questionnaire was not designed to obtain definite information on this subject, it is probable that the present distribution system could be constantly subjected to improvement. This particularly applies to the distribution of fresh shellfish in the West and fresh fish in the North Central area and the West. In these areas and for these products the number of respondents answering "yes" to the question "Can you generally get the kind of fresh fish or fresh shellfish you want?" was definitely less than the weighted average for the nation as a whole. The data indicate a desire for these products but of course some difficult economic and technological problems exist barring the satiation of these desires which will require continued effort toward their solution. In the meantime, frozen shellfish in the West and frozen fish in the North Central area and West will provide the major source of fish and shellfish requirements in these areas, as is indicated by the present purchase patterns shown in the above table on page 6 .

The principal reason given for liking frozen fish and shellfish was ease of preparation, and the principal reason given for liking fresh fish and shellfish was taste or flavor. This was the case in each area as well as for the nation as a whole. If it cost the same amount to serve fresh fish or frozen fish, most households would prefer to serve fresh fish. This again was found to be the case in each area as well as for the nation as a whole. The majority of the respondents in the North Central area answered in this manner in spite of the fact that a majority in that area use frozen fish more often as compared to their use of fresh fish. This again points up the lack of availability of fresh fish in the North Central area together with the problems associated with that situation.

Individual species or products served are shown in detail by areas, and nationally in the summaries of the replies to questions which follow. The intensity or lack of intensity with which a particular species or product is served within an area as compared to another may be determined from the data shown. Some interesting features of fishery products distribution for the nation's households are shown in this connection. A study of the question "What kind do you usually serve?" for each of the various types of products will indicate the following.

Shrimp, both fresh and frozen, although the major item in the Northeast, are not served as intensively there as in the other three areas. Competition of other shellfish appears to be stronger there than in the other areas. Oysters are an important fresh shellfish item but do not rank high as a frozen or canned product. Fresh oysters are an important item in households of the North Central area. The concentration of the use of frozen ocean perch fillets in the North Central and Southern areas is shown. The usual pattern of use of locally caught fish is shown among the species named for fresh fish. For canned fish, some interesting information on distribution with respect to households is given. Canned salmon is used relatively extensively in the North Central and Southern areas whereas canned tuna is used to a degree considerably less than the national average use in these areas. On the other hand, canned tuna is used relatively extensively in the Northeast and Western areas and in these areas salmon is used less than the national average use. Such information is

illuminating and should be given considerable thought to determine if any improvement in the distribution of these products may be made. These are but a few of the fishery products for which regional-use data is shown and information for many others is shown in the summaries.

Specifically, with respect to frozen fish, by far the majority of persons fry this product when cooking it. This was found to be true in all areas and particularly with respect to the North Central and Southern areas. Most persons prefer to buy fillets and they prefer them with the skins off. This was found in all areas and it is also to be noted that steaks are used rather heavily in the West. The type of store where frozen fish was last bought was predominately the super market for all areas.

Frozen fish wrapped only in cellophane was the type of packaged product bought most often in all areas except the West, principally because it was the only type of packaged frozen fish available for purchase, although it was also indicated that that type of packaging is the one generally most preferred. Many people like the fact that you can see the contents of this type of package. In the Western area consumer-pack frozen fish is bought by a greater number of respondents and it was also found that a greater number in this area prefer that type of packaging. Most people who use frozen fish feel that their present consumption is about a maximum and that they would not purchase any more because they use enough now. This was true for all areas. However, for the South and the West, the data show that lack of availability of frozen fish is also of importance in restricting the use of frozen fish in those areas.

With respect to consumer-pack frozen fish, a majority of respondents in all areas preferred the one-pound size and a long, flat shape. In all areas a majority of those respondents who had bought breaded frozen fish or shellfish products like those products. There is some interest in the purchase of a complete frozen fish or shell fish dinner containing fish or shellfish, potatoes and vegetables in a ready to-heat container. Although a majority of respondents in each

area indicated that they would not like such a product, the number who indicated that they would like such a product is worth noting in each region. Information on mail order purchase of frozen fish was also obtained. Because of the limited number of replies to some questions on mail order purchase of frozen fish and shellfish, the summaries for those questions are reproduced subsequently primarily to show general tendencies in each of the areas with respect to this type of distribution. Purchase of frozen fish and shellfish by mail order was not found on a large scale. The indications were that it is confined predominately to the North Central area. Based on actual numbers of respondents who answered "Yes" to the question "If mail order were available, would you purchase it by mail?" the North Central area and the South gave greater indications of possibilities for expansion of this service than the other two areas.

The aforementioned are just a few of the major points of interest developed in the survey and reported herein. Many more may be found in the ensuing summaries.

SUMMARIES OF REPLIES TO QUESTIONS

Frequency of Use

Frozen shellfish

Have you served it during the past year?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Yes	19.4	22.7	14.3	23.6	19.4
No.	80.3	76.8	84.7	76.1	80.0
Don't know.	—	.4	.7	.3	.4
Blank, etc.	.3	.1	.3	—	.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

When was the last time you served frozen shellfish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Within the past week.	5.2	9.6	6.7	11.8	8.2
Within the past month	33.1	31.9	30.5	25.0	30.8
Within the past year.	48.9	50.0	50.5	36.8	47.7
Don't remember.	8.3	6.2	12.3	23.7	11.0
Blank, etc.	4.5	2.3	—	2.7	2.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480

Frequency of Use (Continued)

Frozen shellfish (Continued)

Is there any particular season that you serve it more often than other seasons?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Summer	9.7	4.2	8.6	2.6	6.5
Fall	1.5	1.8	7.6	1.3	2.9
Winter	4.5	13.9	12.4	1.3	9.0
Spring	2.3	5.4	2.9	5.3	4.0
Fall and winter.	—	1.0	1.0	—	.4
Summer and spring.	—	1.0	—	—	.2
No particular season	82.0	72.7	67.5	89.5	77.0
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480

How often do you serve it in this season?

Data insufficient - not analyzed.

Is there a particular day of the week that you serve it?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Monday	—	.6	—	—	.2
Tuesday.	—	—	—	—	—
Wednesday.	—	.6	—	—	.2
Thursday	.8	—	—	1.3	.4
Friday	53.3	30.1	21.9	28.9	34.6
Saturday	.8	—	2.9	—	.8
Sunday	—	—	2.9	—	.6
No particular day.	45.1	66.9	72.3	68.5	62.8
Blank, etc.	—	1.8	—	1.3	.4
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480

Frequency of Use (Continued)

Frozen shellfish (Continued)

What do you particularly like about frozen shellfish?

Reasons given:	North- east %	North Central %	South %	West %	U.S. %
Taste:	27.1	30.5	29.1	39.8	31.8
Like flavor.	27.1	28.9	29.1	37.8	30.8
Uniformity of flavor	—	1.6	—	2.0	1.0
Ease of preparation:	45.7	46.1	49.6	42.7	46.1
Easy to prepare.	42.9	43.0	41.9	41.7	42.3
Cooks better	1.4	—	—	—	.2
Cleaned or cleaner	—	.8	5.1	—	1.7
Good for cocktails, salads, etc.	1.4	2.3	2.6	1.0	1.9
Ease of storage:	7.2	10.9	6.8	7.8	8.4
Easy to store in refrigerator. .	7.2	10.9	6.8	7.8	8.4
Availability:	5.7	8.6	3.4	5.8	6.0
Frozen easily available.	5.7	8.6	3.4	5.8	6.0
Price:	5.7	—	—	—	1.0
Cheaper.	5.7	—	—	—	1.0
Miscellaneous:	8.6	3.9	11.1	3.9	6.7
No bones	—	.8	1.7	1.0	1.0
Like tenderness.	—	—	.9	—	.2
Less odor.	—	—	.9	—	.2
Gives variety in diet.	8.6	3.1	7.6	2.9	5.3
Totals.	100.0	100.0	100.0	100.0	100.0
Number of answers /	70	128	117	103	418

/ Of the 480 respondents asked this question some did not answer and a few gave more than one reason.

Frequency of Use (Continued)

Frozen shellfish (Continued)

Can you generally get the kind of frozen shellfish you want?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Yes	82.0	78.9	77.1	73.7	78.5
No.	2.3	7.8	11.4	3.9	6.5
Don't know.	3.0	3.0	1.9	5.3	3.1
Blank, etc.	12.7	10.3	9.6	17.1	11.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	133	166	105	76	480

What kind do you usually serve?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Shrimp.	54.1	83.1	77.1	76.3	72.7
Lobsters.	30.8	9.0	4.8	—	12.7
Crabmeat.	12.8	4.2	16.2	10.5	10.2
Oysters	2.3	10.8	2.9	3.9	5.6
Scallops.	14.3	1.8	—	5.3	5.4
Clams	1.5	—	2.9	—	1.0
No particular kind.	6.0	1.2	10.5	7.9	5.6
Totals	<u>121.8</u>	<u>110.1</u>	<u>114.4</u>	<u>103.9</u>	<u>113.2</u> 1/
Number asked.	133	166	105	76	480

1/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency of Use (Continued)

Fresh shellfish

Have you served it during the past year?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Yes	35.5	18.4	24.7	27.6	26.2
No.	64.2	81.0	74.5	71.4	73.2
Don't know.	—	.2	.4	1.0	.3
Blank, etc.	.3	.4	.4	—	.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

When was the last time you served fresh shellfish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U. S.</u> <u>%</u>
Within the past week.	14.0	17.0	21.5	13.5	16.7
Within the past month	31.7	23.0	27.0	22.5	27.3
Within the past year.	43.0	52.6	34.8	30.3	40.9
Don't remember.	10.3	7.4	16.7	32.6	14.7
Blank, etc.	1.0	—	—	1.1	.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	243	135	181	89	648 *

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Fresh shellfish (Continued)

Is there any particular season that you serve it more often than other seasons?

	North- east <u>%</u>	North Central <u>%</u>	South <u>%</u>	West <u>%</u>	U.S. <u>%</u>
Summer	11.1	2.2	14.4	6.7	8.0
Fall	.8	3.7	9.4	—	3.4
Winter	9.1	19.3	10.5	1.1	10.5
Spring	1.2	3.0	3.3	3.4	2.5
Fall and winter.	.4	5.2	2.2	—	1.8
No particular season	72.8	65.9	60.2	85.4	69.1 *
Blank, etc.	4.6	.7	—	3.4	4.7
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	243	135	181	89	648*

How often do you serve it in this season?

Data insufficient - not analyzed.

Is there a particular day of the week that you serve it?

	North- east <u>%</u>	North Central <u>%</u>	South <u>%</u>	West <u>%</u>	U.S. <u>%</u>
Monday	.4	.7	—	—	.3 *
Tuesday.	—	—	—	1.1	.2 *
Wednesday.	1.2	.7	—	—	.6
Thursday	.8	1.5	—	1.1	.8
Friday	39.5	25.2	23.8	28.1	30.6
Saturday	.8	1.5	3.9	—	1.7
Sunday	.4	.7	1.7	—	.8
No particular day.	55.2	69.7	70.6	68.6	64.5
Blank, etc.	1.7	—	—	1.1	.5 *
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	243	135	181	89	648 *

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Fresh shellfish (Continued)

What do you particularly like about fresh shellfish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Reasons given:					
Taste:	68.5	65.4	81.2	63.4	70.6
Like flavor.	66.4	64.5	80.4	60.6	69.0
Uniformity of flavor	.5	.9	.8	2.8	1.0
Like lobster	1.1	—	—	—	.4
Children like.	.5	—	—	—	.2
Ease of preparation:	15.8	13.1	8.0	8.5	12.0
Easy to prepare.	8.8	8.4	6.5	2.8	7.2
Cooks better	.5	—	—	—	.2
Cleaned or cleaner	1.6	—	—	—	.6
Good for cocktails, salads, etc.	4.9	4.7	1.5	5.7	4.0
Ease of storage:	—	—	—	1.4	.2
Easy to store in refrigerator.	—	—	—	1.4	.2
Availability:	—	1.9	3.6	7.0	2.4
Fresh easily available	—	1.9	1.5	4.2	1.4
Frozen not available	—	—	—	1.4	.2
Go sport fishing	—	—	2.1	1.4	.8
Price:	2.7	.9	1.5	4.2	2.2
Cheaper.	2.7	.9	1.5	4.2	2.2
Nutrition:	1.6	4.7	2.1	1.4	2.4
Nutritious, healthy.	1.6	4.7	2.1	1.4	2.4
Habit:	2.2	4.7	1.5	1.4	2.4
Prejudiced to fresh.	2.2	3.8	1.5	1.4	2.2
Habit.	—	.9	—	—	.2
Miscellaneous:	9.2	9.3	2.1	12.7	7.8
No bones	1.1	—	—	—	.4
Gives variety in diet.	7.0	8.4	2.1	12.7	6.8
Like appearance.	1.1	.9	—	—	.6
Totals.	100.0	100.0	100.0	100.0	100.0
Number of answers <u>2/</u>	184	107	137	71	499

2/ Of the 650 respondents asked this question some did not answer and a few gave more than one reason.

Frequency of Use (Continued)

Fresh shellfish (Continued)

Can you generally get the kind of fresh shellfish you want?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>	
Yes.	75.3	71.1	67.4	53.9	69.3	
No	5.3	12.6	13.2	5.6	9.1	
Don't know	3.7	4.4	6.6	10.1	5.6	*
Blank, etc.	15.7	11.9	12.8	30.4	16.0	*
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	
Number asked	243	135	181	89	648	*

What kind do you usually serve?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>	
Shrimp	43.6	60.0	60.8	44.9	52.0	*
Oysters.	12.3	31.1	21.5	10.1	18.5	
Lobsters	34.2	9.6	3.9	12.4	17.5	
Crabmeat	13.6	3.7	23.2	31.5	16.6	
Clams.	16.9	.7	.6	6.7	7.5	
Scallops	8.6	1.5	—	10.1	4.9	
Black mussels.	.8	—	—	—	.3	
Squid.	.4	—	—	—	.2	
Snails	.4	—	—	—	.2	
Octopus (devilfish).	.4	—	—	—	.2	
No particular kind	5.8	3.0	9.4	16.9	7.7	
Totals.	<u>137.0</u>	<u>109.6</u>	<u>119.4</u>	<u>132.6</u>	<u>125.6</u>	3/*
Number asked	243	135	181	89	648*	

2/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Canned shellfish

Have you served it during the past year?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes.	29.8	17.2	10.8	29.8	20.4
No	68.5	81.4	87.1	66.8	77.6
Don't know	.1	.4	.5	.9	.5
Blank, etc..	1.6	1.0	1.6	2.5	1.5
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	685	732	734	322	2473

What kind do you usually serve?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Shrimp	47.5	54.0	38.0	56.3	49.3
Crabmeat	40.7	17.5	34.2	40.6	33.8
Lobsters	19.6	11.9	6.3	7.3	13.2
Oysters.	2.0	8.7	20.3	12.5	8.5
Clams.	1.0	1.6	1.3	4.2	1.8
No particular kind.	6.4	3.2	5.1	4.2	4.9
Totals.	<u>117.2</u>	<u>96.9</u>	<u>105.2</u>	<u>125.1</u>	<u>111.5</u> ^{4/}
Number asked	204	126	79	96	505 *

^{4/} A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Frozen fish

Have you served it during the past year?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes.	51.8	62.2	42.9	51.9	52.2
No	48.0	37.7	56.5	47.2	47.4
Don't know	—	—	.4	.9	.3
Blank, etc..	.2	.1	.2	—	.1
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	685	732	734	322	2473

When was the last time you served frozen fish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Within the past week	24.2	14.9	18.4	16.8	18.6
Within the past month.	42.8	44.2	38.1	36.5	41.3
Within the past year	24.2	31.9	32.7	30.5	30.0
Don't remember	5.1	9.0	10.8	13.2	8.8
Blank, etc.	3.7	—	—	3.0	1.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Frozen fish (Continued)

Is there any particular season that you serve it more often than other seasons?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Summer	2.5	1.8	3.1	1.8	2.3
Fall	.3	.9	5.1	—	1.6
Winter	5.9	7.9	8.3	2.4	6.7
Spring	5.6	4.0	3.8	8.4	5.0
No particular season	81.2	84.1	76.8	85.0	81.7
Blank, etc.	4.5	1.3	2.9	2.4	2.7
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

How often do you serve it in this season?

Data insufficient - not analyzed .

Is there a particular day of the week that you serve it?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Monday	.3	—	1.0	—	.2
Tuesday.	—	—	—	.6	.1
Wednesday.	1.1	—	—	—	.3
Thursday	1.1	—	1.0	—	.5
Friday	53.8	31.4	25.1	34.7	36.6
Saturday	.3	.4	2.9	—	.9
Sunday	—	—	1.0	—	.2
No particular day.	42.0	67.3	67.6	63.5	60.0
Blank, etc.	1.4	.9	1.4	1.2	1.2
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Frequency of Use (Continued)

Frozen fish (Continued)

What do you particularly like about frozen fish?

	North- east %	North Central %	South %	West %	U.S. %
Reasons given:					
Taste:	23.4	19.1	25.1	27.2	22.9*
Like flavor	19.4	17.8	23.7	23.9	20.5
Uniformity of flavor	3.4	1.3	1.4	2.0	2.0*
Children like	.6	—	—	1.3	.4
Ease of preparation:	44.8	39.9	45.9	36.4	42.3
Easy to prepare	35.7	38.1	43.0	35.1	38.3*
Cooks better	—	—	—	1.3	.2
Cleaned or cleaner	9.1	1.8	2.9	—	3.8*
Ease of storage:	14.1	12.3	7.5	13.2	11.7*
Easy to store in refrigerator	14.1	12.3	7.5	13.2	11.7*
Availability:	3.5	7.8	8.2	6.0	6.5*
Frozen easily available	3.5	7.8	8.2	6.0	6.5*
Price:	2.8	2.9	3.9	4.6	3.4*
Cheaper	2.8	2.9	3.9	4.6	3.4*
Nutrition:	.3	.8	.4	—	.4
Nutritious, healthy	.3	.8	.4	—	.4
Habit:	—	—	—	.7	.1
Habit	—	—	—	.7	.1
Miscellaneous:	11.1	17.2	9.0	11.9	12.7
No bones	4.1	8.4	5.4	4.5	5.9
Like tenderness	—	.5	—	.7	.3
Less odor	1.6	.5	—	—	.6
Gives variety in diet	5.1	7.5	3.2	6.0	5.5
Like appearance	.3	.3	.4	.7	.4
Totals	100.0	100.0	100.0	100.0	100.0
Number of answers <u>5</u> /	319	383	279	151	1132

Can you generally get the kind of frozen fish you want?

	North- east %	North Central %	South %	West %	U.S. %
Yes	79.7	73.4	78.7	67.1	75.6
No	1.4	6.6	5.4	4.2	4.6
Don't know	2.0	4.4	3.8	3.0	3.4
Blank, etc.	16.9	15.6	12.1	25.7	16.4
Totals	100.0	100.0	100.0	100.0	100.0
Number asked	355	455	315	167	1292

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

5/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason.

Frequency of Use (Continued)

Frozen fish (Continued)

What kind do you usually serve?

	<u>North-</u> <u>east</u>	<u>North</u> <u>Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>	
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	
Ocean perch	15.8	38.2	33.3	3.0	26.3	
Haddock	38.3	22.0	12.4	8.4	22.3	
Flounder	19.4	4.8	13.3	23.3	13.3	
Halibut	10.1	10.1	2.2	26.9	10.3	
Cod	10.1	11.4	3.2	7.2	8.5	
Salmon	2.5	6.2	3.2	19.8	6.2	
Whiting	.3	2.0	1.0	3.6	1.5	
Swordfish	2.3	.2	.3	.6	.9	
Mackerel	2.3	—	—	—	.6	
Mullet	—	.2	1.3	—	.4	
Red snapper	.3	—	1.3	—	.4	
Smelt <u>6/</u>	—	.7	—	.6	.3	
Croaker	—	—	1.3	—	.3	
Red drum	.3	—	.6	—	.2	
Perch	.5	—	.3	—	.2	
Shad	.3	—	.3	—	.2	
Herring <u>6/</u>	—	.7	—	—	.2	
Bluefish	.6	—	—	—	.2	
Eel	.3	—	—	—	.1	
Steakfish (shark)	—	—	.3	—	.1	
Rockfish	—	—	—	.6	.1	
All freshwater species <u>7/</u>	.9	14.5	8.3	9.6	8.6	
No particular kind	16.1	12.7	24.1	13.8	16.6	
Totals	<u>120.4</u>	<u>123.7</u>	<u>106.7</u>	<u>117.4</u>	<u>117.8</u>	<u>8/</u>
Number asked	355	455	315	167	1292	

6/ Unable to distinguish between freshwater and saltwater varieties.

7/ Excluding a small amount of those varieties marked above with footnote 6/.

8/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency of Use (Continued)

Fresh fish

Have you served it during the past year?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	76.4	62.7	71.0	71.1	70.0
No	23.1	36.9	28.2	28.9	29.4
Don't know.	.1	.4	.3	---	.3
Blank, etc.	.4	---	.5	---	.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

When was the last time you served fresh fish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Within the past week.	27.9	8.7	24.4	24.5	21.1
Within the past month	40.5	31.4	33.0	31.9	35.0
Within the past year.	24.7	49.2	28.8	24.5	32.4
Don't remember.	4.9	8.9	11.3	15.3	9.2
Blank, etc.	2.0	1.8	2.5	3.8	2.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	523	459	521	229	1732

Frequency of Use (Continued)

Fresh fish (Continued)

Is there any particular season that you serve it more often than other seasons?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Summer	6.1	21.8	13.4	14.0	13.5
Fall	.4	.2	5.8	.9	2.0
Winter	4.8	2.0	4.6	3.1	3.8
Spring	4.8	8.5	6.3	3.5	6.1
No particular season	80.9	63.4	64.1	74.7	70.4
Blank, etc.	3.0	4.1	5.8	3.8	4.2
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	523	459	521	229	1732

How often do you serve it in this season?

Data insufficient - not analyzed.

Is there a particular day of the week that you serve it?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Monday	.4	.2	—	—	.2
Tuesday.	.8	—	.2	.4	.3 *
Wednesday.	1.1	—	.2	—	.4
Thursday	2.1	.2	1.3	.4	1.2
Friday	52.2	28.3	21.7	31.9	34.0
Saturday	.6	.2	6.3	—	2.1
Sunday	.4	.2	.2	.4	.3 *
No particular day.	41.3	68.2	66.6	62.0	58.8
Blank, etc.	1.1	2.7	3.5	4.9	2.7 *
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	523	459	521	229	1732

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951. Part I - National Summary.

Frequency of Use (Continued)

Fresh fish (Continued)

What do you particularly like about fresh fish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Reasons given:					
Taste:	66.8	72.9	75.1	44.0	67.8
Like flavor	66.5	72.1	73.8	39.0	66.4
Uniformity of flavor.	—	.8	1.1	4.5	1.2
Children like	.3	—	.2	.5	.2
Ease of Preparation:	3.8	1.9	2.4	8.5	3.6
Easy to prepare	2.3	1.9	2.2	6.5	2.7
Cooks better.	1.0	—	—	1.5	.5
Cleaned or cleaner.	—	—	—	.5	.1
Good for cocktails, salads, etc.. . .	—	—	.2	—	.1
No thawing.	.5	—	—	—	.2
Availability:	—	6.7	6.2	16.0	6.0
Fresh easily available.	—	.6	.4	5.5	1.1
Go sport fishing.	—	6.1	5.8	10.5	4.9
Price:	9.8	3.1	4.5	5.0	5.7
Cheaper	9.8	3.1	4.5	5.0	5.7
Nutrition:	2.5	2.5	3.3	1.0	2.5
Nutritious, healthy	2.5	2.5	3.3	1.0	2.5
Habit:	2.5	4.2	2.2	6.0	3.3
Prejudiced to fresh	2.5	3.9	2.2	6.0	3.2
Habit	—	.3	—	—	.1
Miscellaneous:	14.6	8.7	6.3	19.5	11.1
No bones <u>2/</u>	1.0	—	1.1	1.0	.7
Like tenderness	—	.3	.2	—	.2
Less odor	—	.9	—	—	.2
Gives variety in diet	12.6	7.5	5.0	15.0	9.1
Like appearance	.5	—	—	—	.2
Buy whole for baking.	.5	—	—	—	.2
Not as moist.	—	—	—	3.5	.5
Totals	100.0	100.0	100.0	100.0	100.0
Number of answers <u>10/</u>	397	359	461	200	1417

9/ Referring to steaked fish.

10/ Of the 1732 respondents asked this question some did not answer and a few gave more than one reason.

Frequency of Use (Continued)

Fresh fish (Continued)

Can you generally get the kind of fresh fish you want?

	<u>North- east</u>	<u>North Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes.	73.8	45.8	60.5	55.0	60.0
No	7.1	25.3	13.6	11.8	14.5
Don't know	2.6	9.4	7.3	2.2	5.7 *
Blank, etc.	16.5	19.5	18.6	31.0	19.8 *
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	523	459	521	229	1732

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Fresh fish (Continued)

What kind do you usually serve?

	North- east <u>%</u>	North Central <u>%</u>	South <u>%</u>	West <u>%</u>	U.S. <u>%</u>	
Flounder	18.5	--	6.3	10.0	8.8	
Salmon	6.7	3.5	.4	25.3	6.4	-
Halibut.	8.4	4.6	.2	17.5	6.2	
Haddock.	16.6	2.8	1.2	--	6.2	
Perch <u>11/</u>	3.6	11.5	3.1	5.2	5.7	
Mackerel	9.9	1.1	3.5	1.7	4.6	
Cod.	10.3	1.5	.2	6.1	4.4	
Mullet	--	.7	13.8	--	4.3	
Swordfish.	8.6	.2	.2	--	2.8	
Sea trout (weakfish)	2.5	.4	4.6	1.3	2.4	
Red snapper.	.2	.7	6.0	2.2	2.3	
Croaker.	.4	--	4.0	--	1.4	
Whiting.	1.9	1.1	.8	.4	1.2	*
Smelt <u>11/</u>	1.7	1.1	--	1.7	1.0	
Butterfish	2.3	--	.8	.4	1.0	
Scup (porgy)	2.5	--	1.0	--	1.0	
Bluefish	2.5	--	--	--	.7	
Sea bass	2.1	--	.4	--	.7	
Spot	.2	--	2.3	--	.7	
Striped bass	--	--	2.1	.4	.6	
Barracuda.	--	--	--	4.4	.6	
Shad	1.1	--	.4	--	.5	
Tuna	--	--	--	2.6	.3	
Herring <u>11/</u>	--	1.1	--	--	.3	
King whiting	.2	--	.6	--	.2	
Eel.	.8	--	--	--	.2	
Steakfish (shark).	--	--	.2	--	.1	
Swellfish.	.4	--	--	--	.1	
Red drum	--	--	.4	--	.1	*
Kingfish (Calif.).	--	--	--	.9	.1	
Bonito	.2	--	--	--	.1	
Pollock.	.2	--	--	--	.1	
Pompano.	--	--	.2	--	.1	
Grouper.	--	--	.4	--	.1	
Cabrillo	--	--	--	.4	.1	
All freshwater species <u>12/</u>	16.3	65.1	41.5	20.5	37.5	
No particular kind	19.1	15.5	21.1	18.3	18.7	
Totals.	<u>137.2</u>	<u>110.9</u>	<u>115.7</u>	<u>119.3</u>	<u>121.6</u>	13/*
Number asked	523	459	521	229	1732	

11/ Unable to distinguish between freshwater and saltwater varieties.

12/ Excluding a small amount of those varieties marked above with footnote 11/.

13/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Frequency of Use (Continued)

Canned fish

Have you served it during the past year?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes.	79.4	79.9	71.5	83.2	77.7
No	19.6	19.4	26.2	15.8	21.0
Don't know	.1	—	1.0	.7	.4
Blank, etc..	.9	.7	1.3	.3	.9
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	685	732	734	322	2473

What kind do you usually serve?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Salmon	54.8	69.4	72.8	45.9	62.9
Tuna	75.6	49.6	35.8	69.8	56.0
Sardines	10.5	11.5	17.1	15.7	13.3
Mackerel	1.1	1.5	3.6	1.1	1.9
Cod.	2.2	.7	.8	.4	1.0
Herring.	.4	—	.6	—	.3
Anchovies.	.6	—	—	—	.2
Caviar	—	—	—	.4	.1
Fish flakes.	.2	—	—	—	.1
Kippers.	.2	—	—	—	.1
Shad	.2	—	—	—	.1
No particular kind	2.0	3.4	3.0	3.0	2.8
Totals.	<u>142.8</u>	<u>136.1</u>	<u>133.7</u>	<u>136.3</u>	<u>138.8</u>
Number asked	544	585	525	268	1922

14/ A few respondents did not answer this question and some gave more than one species or product so that the total adds up to more than 100 percent.

Frequency of Use (Continued)

Cured fish or shellfish -- pickled, salted, smoked, etc.

Have you served it during the past year?

	North- east %	North Central %	South %	West %	U.S. %
Yes	29.1	21.0	9.9	23.3	20.3
No.	65.1	74.9	82.6	71.4	74.0
Don't know.	.4	.1	.8	1.2	.6
Blank, etc.	5.4	4.0	6.7	4.1	5.1
Totals	100.0	100.0	100.0	100.0	100.0
Number asked.	685	732	734	322	2473

What kind do you usually serve?^{15/}

	North- east %	North Central %	South %	West %	U.S. %
Herring	39.7	44.2	37.0	30.7	39.3
Salmon.	14.6	2.6	6.8	37.3	13.2
Cod	14.1	2.6	—	12.0	8.1
Mackerel.	11.6	.6	21.9	—	8.0
Whitefish	12.6	5.2	2.7	4.0	7.6
Sardines.	8.0	5.8	2.7	5.3	6.2
Finnan haddie	3.5	3.2	—	5.3	3.2
Mullet.	—	—	11.0	—	1.6
Swordfish	1.0	.6	—	4.0	1.2
Anchovies	.5	.6	—	2.7	.8
Blind robins.	1.0	1.3	—	—	.8
Eel	1.5	—	—	—	.6
Spot.	—	—	4.1	—	.6
Carp.	1.0	—	—	—	.4
Bloaters.	1.0	—	—	—	.4
Butterfish.	.5	—	1.4	—	.4
Halibut	.5	.6	—	—	.4
Barracuda	—	—	—	1.3	.2
Flounder.	.5	—	—	—	.2
Sea bass.	.5	—	—	—	.2
Shrimp.	—	—	—	1.3	.2
Trout	—	.6	—	—	.2
No particular kind.	8.0	3.2	6.8	6.7	6.2
Totals	120.1	71.1	94.4	110.6	100.0
Number asked.	199	154	75	75	501

^{15/} Most respondents named a species or several species in their reply and did not indicate the specific type of cure.

^{16/} A few respondents did not answer this question and some gave more than one species or product so that the total adds up to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers -- 1951, Part I - National Summary.

Preferences - Fresh vs. Frozen Fish and Shellfish

If it cost you the same amount to serve your family fresh fish or frozen fish, which would you prefer?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fresh fish.	56.2	52.7	63.9	57.5	57.6
Frozen fish.	20.3	25.3	15.9	16.7	20.0
No preference.	17.5	15.0	11.3	17.4	14.9
Blank, etc.	6.0	7.0	8.9	8.4	7.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

What would you say is the main advantage of serving "fresh" or "frozen" fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fresh fish:					
Taste	67.3	70.5	72.7	37.3	66.0
Preparation:	10.1	9.8	6.0	19.5	9.9
Ease of preparation.	5.2	4.9	3.6	11.9	5.4 *
No thawing	2.8	4.9	2.4	7.6	3.9 *
Fries better	2.1	—	—	—	.6 *
Availability:	1.0	3.9	3.0	17.3	4.6
Available.	1.0	1.8	1.9	9.7	2.7
Variety available.	—	—	—	3.3	.4
Go sport fishing	—	2.1	1.1	4.3	1.5
Price	7.0	1.0	3.6	4.9	4.0
Quality:	7.8	8.3	4.9	26.5	9.4
Sure of freshness.	7.8	7.8	4.5	18.9	8.1
Sure of quality.	—	.5	.4	7.6	1.3
Nutritious.	3.4	2.8	3.2	3.8	3.2
Habit and prejudices.	8.3	1.0	1.3	6.5	3.8
Miscellaneous:	—	1.3	.2	2.2	.6
Like appearance.	—	—	—	1.1	.1
Packaging.	—	—	—	1.1	.1
Less odor.	—	1.3	.2	—	.4
Totals.	<u>104.9</u>	<u>98.6</u>	<u>94.9</u>	<u>118.0</u>	<u>101.5</u> 17/
Number asked.	385	386	469	185	1425

17/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Preferences - Fresh vs. Frozen Fish and Shellfish (Continued.)

What would you say is the main advantage of serving "fresh" or "frozen" fish?
(Continued)

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Frozen fish:					
Taste	4.3	11.4	16.2	25.9	12.1
Preparation:	72.7	50.8	63.2	35.2	58.2
Ease of preparation	45.3	45.9	59.0	27.8	46.9
Cleaned	27.4	4.9	4.2	7.4	11.3
Storageability.	23.0	24.3	8.5	24.1	20.2
Availability.	2.9	9.7	.9	5.6	5.3
Price	2.9	2.7	2.6	5.6	3.0
Quality:	7.9	6.5	5.1	16.7	7.6
Sure of freshness	—	4.3	3.4	13.0	3.8
Sure of quality	7.9	2.2	1.7	3.7	3.8
Nutritious.	—	1.6	—	—	.6
Miscellaneous:	10.8	9.7	11.1	7.4	10.1
Packaging	2.2	—	—	—	.6
Less odor	4.3	1.6	1.7	1.9	2.4
No bones.	4.3	8.1	9.4	5.5	7.1
Totals.	<u>124.5</u>	<u>116.7</u>	<u>107.6</u>	<u>120.5</u>	<u>117.1</u> 18/
Number asked.	139	185	117	54	495

Is there anyone in your family who will eat fresh fish but will not eat frozen fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	12.4	9.0	7.9	13.0	10.1
No.	70.0	76.6	69.5	66.8	71.3
Don't know.	11.6	6.6	13.4	10.9	10.6
Blank, etc.	6.0	7.8	9.2	9.3	8.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

18/ A few respondents did not answer this question and some gave more than one answer so that total adds up to more than 100 percent.

Preferences - Fresh vs. Frozen Fish and Shellfish (Continued)

How many are children under 15 and how many are adults that will not eat it? ^{19/}

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Adults.	4.4	3.4	2.7	5.0	3.7
Children under 15	1.9	2.0	1.2	3.9	2.1

Percentages based on adults
and children in sample:

Adults.	1822	1811	1878	742	6253
Children under 15	561	736	827	406	2530

Generally speaking, do you think people serve fish more often when meats go up in price or not?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	51.8	50.4	54.1	54.3	52.4
No.	18.0	15.3	6.8	12.7	13.2
Don't know.	22.9	25.7	27.7	22.7	25.1
Blank, etc.	7.3	8.6	11.4	10.3	9.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	685	732	734	322	2473

^{19/}The summary of information for this question has been revised from that which is shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Preferences - Fresh vs. Frozen Fish and Shellfish (Continued)

Is there any particular reason why you don't use frozen fish?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Reasons given:					
Taste	48.8	57.8	41.4	55.2	48.9
Price	14.5	8.8	11.2	11.2	11.8
Availability	3.8	2.8	15.9	5.6	7.9
Prefer fresh fish:	12.6	11.7	15.9	21.6	14.7
Prejudiced to fresh fish	12.6	8.3	4.2	15.2	9.3
Fresh available	--	2.8	6.7	3.2	3.2
Go sport fishing	--	.6	5.0	3.2	2.2
Other competitive foods:	.6	--	3.2	--	1.3
Supply of meat	--	--	2.6	--	.9
Miscellaneous foods	.6	--	.6	--	.4
Preparation:	4.4	2.8	.6	2.4	2.6
Thawing	1.9	1.1	.3	1.6	1.2
Trouble to cook	2.5	1.7	.3	.8	1.4
Health:	2.8	1.1	.3	.8	1.4
Not as nutritious	1.9	--	--	.8	.8
Allergy	.9	--	--	--	.3
Diet restricted	--	1.1	.3	--	.3
Odor	1.6	3.9	--	.8	1.4
Storage:	.6	.6	1.3	1.6	1.0
Haven't suitable refrigeration.	--	--	1.3	--	.4
Too much in package	.6	.6	--	1.6	.6
Quality:	.9	2.2	1.0	.8	1.1
Soft, moist, etc.	.9	1.6	.3	.8	.8
Can't tell quality	--	.6	.7	--	.3
Never tried	9.4	8.3	9.2	--	7.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers 20/	318	180	314	125	937

20/ Of the 1172 respondents who did not serve frozen fish some did not answer this question and a few gave more than one reason.

Preferences - Fresh vs. Frozen Fish and Shellfish (Continued)

Which do you use more often--fresh or frozen shellfish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fresh shellfish	47.0	35.3	49.1	35.9	42.4
Frozen shellfish	20.0	48.5	34.0	46.2	35.2
About the same	33.0	16.2	16.9	17.9	22.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers <u>21</u> /	85	68	53	39	245

Which do you use more often--fresh or frozen fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fresh fish	42.0	27.9	47.2	38.7	38.3
Frozen fish	35.8	61.2	43.5	36.0	45.8
About the same	22.2	10.9	9.3	25.3	15.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers <u>21</u> /	243	258	193	111	805

Particular Preferences - Frozen Fish and Shellfish

General - cooking, cuts preferred, availability, etc.

How about frozen fish--do you think people buy frozen fish more often when meat prices go up than they ordinarily do or not?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	52.4	57.1	59.4	56.3	56.3
No	16.9	14.1	7.6	12.0	13.0
Don't know	26.8	25.5	30.2	25.1	26.9
Blank, etc.	3.9	3.3	2.8	6.6	3.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

21/ These questions were asked an undetermined number of respondents who served either both fresh and frozen shellfish or fresh and frozen fish and percentages are based on number of answers.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

What methods of cooking frozen fish do you usually use--that is, frying, baking, broiling, boiling, or any other way?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Frying	56.6	82.0	86.7	64.7	73.9
Baking	13.2	4.2	3.5	3.6	6.4
Boiling	.6	.7	--	2.4	.7
Frying and baking	16.9	6.6	4.4	17.4	10.3
Frying and boiling	1.4	--	1.6	4.2	1.3
Frying, baking and boiling	.6	.2	1.0	1.8	.7
Broiling: Flame	18.6	13.0	8.6	4.8	12.4
Electric	5.6	4.6	4.8	16.2	6.4
Totals	<u>113.5</u>	<u>111.3</u>	<u>110.6</u>	<u>115.1</u>	<u>112.1</u> 22/*
Number asked	355	455	315	167	1292

In your experience with frozen fish have you found the quality to change from time to time?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Changes	9.9	14.7	10.2	10.8	11.8
Generally the same	81.1	76.3	80.0	75.4	78.4
No opinion	8.5	8.4	8.9	10.8	8.8
Blank, etc.	.5	.6	.9	3.0	1.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

22/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

In what way have you found the quality to change?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Taste changes--woody, dry, strong .	57.1	76.1	71.9	38.9	66.4
Stale, old, not fresh, wormy, spoiled .	11.4	17.9	21.9	33.3	19.1
Thawed, poor refrigeration	14.3	1.5	3.1	--	4.6
Water content excessive	5.7	--	--	16.6	3.3
Odor	--	4.5	6.2	--	3.3
Discoloration	--	6.0	--	--	3.0
Brand and size variations	5.7	1.5	--	5.6	3.0
Totals	<u>94.2</u>	<u>107.5</u>	<u>103.1</u>	<u>94.4</u>	<u>102.7</u> 23/
Number asked	35	67	32	18	152

Will you look at this card and tell me what cuts of frozen fish you prefer to buy?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
1. Whole or round fish	6.8	1.1	1.9	9.0	3.9
2. Drawn fish	.8	1.3	1.3	--	1.0
3. Dressed fish	6.5	7.3	9.2	6.6	7.4
4. Pan-dressed fish	2.3	5.5	5.4	5.4	4.6
5. Steaks	27.6	18.2	15.2	45.5	23.6
6. Fillets	80.3	79.1	74.6	54.5	75.2
Totals	<u>124.3</u>	<u>112.5</u>	<u>107.6</u>	<u>121.0</u>	<u>115.7</u> 24/
Number asked	355	455	315	167	1292

23/ 11.8 percent of those who served frozen fish in the past year found changes in the quality and a few noted more than one change so that total adds up to more than 100 percent.

24/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

Particular Preferences -- Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

The last time you bought frozen fish, which of those cuts did you buy?

	<u>North- east</u>	<u>North Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
1. Whole or round fish	2.3	1.3	1.9	4.2	2.1
2. Drawn fish	--	1.3	1.0	--	.7
3. Dressed fish	2.3	5.9	5.4	3.6	4.5
4. Pan-dressed fish	.6	3.1	3.2	.6	2.1
5. Steaks	11.3	9.2	7.9	36.5	13.0
6. Fillets	80.3	73.8	71.4	40.7	70.7
Blank, etc.	3.2	5.4	9.2	14.4	6.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Do you prefer fillets with the skin on or skinless?

	<u>North- east</u>	<u>North Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Skin on	20.2	30.1	26.0	28.7	26.2
Skinless	60.3	51.4	46.7	56.9	53.4
No preference	18.3	16.5	24.8	11.4	18.3 *
Blank, etc.	1.2	2.0	2.5	3.0	2.1 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

Have you tried frozen fillet of flounder or fillet of sole?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	56.9	35.4	39.7	65.3	46.2
No	33.0	56.0	35.6	28.1	41.1
Don't know	9.3	7.6	23.2	5.4	11.6
Blank, etc.	.8	1.0	1.5	1.2	1.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

In some sections of the country you can get both East Coast and West Coast fillet of flounder and fillet of sole. Do you happen to know whether you ever tried East Coast fillet of sole or flounder, or West Coast fillet of sole or flounder?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Tried East Coast Fillet of Sole or Flounder only	6.9	10.6	15.2	--	8.4
Tried West Coast Fillet of Sole or Flounder only	1.0	5.0	2.4	12.8	4.5
Tried Both	4.0	4.3	4.0	30.3	8.9
Don't Know	88.1	80.1	78.4	56.9	78.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	202	161	125	109	597

Which do you like better, East Coast fillet or West Coast fillet of sole or flounder?

Data insufficient - not analyzed.

Particular Preferences -- Frozen Fish and Shellfish (Continued)

General -- cooking, cuts preferred, availability, etc. (Continued)

About how much frozen fish do you buy for each serving--that is, about how much of a pound do you count on for each member of the family?

	North- east %	North Central %	South %	West %	U.S. %
1/5	--	1.5	--	.6	.6
1/4	23.4	19.1	18.1	37.1	22.4
1/3	18.0	16.0	12.4	14.4	15.5
1/2	51.0	50.3	54.3	33.5	49.3
3/4	3.1	5.7	5.4	1.2	4.3
2/3	.6	.4	1.3	--	.6
1	1.7	3.7	5.7	1.8	3.4
1 1/2	--	.4	--	.6	.2
Blank, etc.	2.2	2.9	2.8	10.8	3.7
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

At what type of store did you last buy frozen fish?

	North- east %	North Central %	South %	West %	U.S. %
Super market	68.2	61.1	68.9	58.1	64.6
Independent food store	20.0	22.9	18.4	13.8	19.8
Fish store	5.9	4.0	7.0	10.2	6.0
General store	1.7	4.2	.6	--	2.1
Meat market	1.7	1.8	--	3.6	1.5
Frozen food locker	.8	2.6	.6	.6	1.4
Chain food store	--	1.5	--	3.0	.9
Other type of store	.3	.4	1.0	1.2	.6
Door to door truck	--	.9	1.0	--	.5 *
Mail order	--	.2	--	--	.1
Blank, etc.	1.4	.4	2.5	9.5	2.5 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

Can you get frozen fish at the place where you do most of your food shopping?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	94.9	92.7	84.5	90.4	91.0
No	3.4	5.1	12.7	4.2	6.3
Don't know	.8	.7	1.3	3.0	1.2
Blank, etc.	.9	1.5	1.5	2.4	1.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Can you generally get any kind you want at this store?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	90.5	86.0	86.5	86.1	87.4 *
No	6.2	12.2	10.5	9.3	9.7 *
Don't know	3.3	1.8	3.0	4.6	2.9 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	337	422	266	151	1176 *

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General - cooking, cuts preferred, availability, etc. (Continued)

Is there anything you dislike about the way frozen fish is kept in the store? 25/

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
No dislike:					
Nothing, no opinion, no answer . .	97.1	97.2	98.4	97.6	97.5
Dislike:					
Improper refrigeration, thawed . .	1.7	1.1	1.0	.6	1.2
Lack of variety	.6	.4	--	1.8	.5
Mixed with other products, hard to get at	.3	.9	.6	--	.5
Public handles	.3	--	--	--	.1
Item not priced	--	.2	--	--	.1
Package torn	--	.2	--	--	.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Packaging

The last time you bought frozen fish, was it unwrapped, wrapped only in cellophane, packed in a box or some other type of package?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Unwrapped	1.1	5.1	4.1	8.4	4.1
Wrapped only in cellophane	56.3	64.0	74.0	33.5	60.4
Packed in box	37.5	26.4	20.3	48.5	30.8 *
Wrapped in paper	.8	2.0	--	--	.9 *
Blank, etc.	4.3	2.5	1.6	9.6	3.8 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

25/ The summary of information for this question has been revised from that which is shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

How did it happen you bought this type instead of another?

	North- east %	North Central %	South %	West %	U.S. %
Only type of packaging available . . .	49.0	48.2	62.8	41.7	51.5
Kind of fish (species) or cut desired. . .	4.2	19.6	17.4	25.9	15.7
See product, visible contents, cellophane	21.4	12.3	9.9	3.7	13.0
Looked good	4.9	8.2	2.9	5.6	5.7
Sanitary, packaged better	7.0	--	1.2	11.0	3.4
Advertising, brand	1.2	2.0	--	.9	1.2
Best buy, cheaper	2.9	2.9	--	1.9	2.0
Storageability	8.2	.9	2.1	2.8	3.3
Trial	--	.3	--	2.8	.4
Habit	.4	4.1	2.9	3.7	2.8
Recipes	.4	--	--	--	.1
Recommended	.4	.9	.8	--	.7
Holds moisture	--	.6	--	--	.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers <u>26/</u>	243	342	242	108	935

Do you prefer to buy your frozen fish unwrapped, wrapped only in cellophane, packed in a box or some other type of package?

	North- east %	North Central %	South %	West %	U.S. %
Unwrapped	.6	2.2	2.2	5.4	2.2
Wrapped only in cellophane	51.3	56.7	66.3	32.9	54.5
Packed in box	36.9	24.2	21.6	45.5	29.8 *
Wrapped in paper	--	.4	--	--	.3 *
Blank, etc.	11.2	16.5	9.9	16.2	13.2 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

26/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

Why do you prefer this type? (Asked of respondents who preferred a different type of packaging from the kind they last bought.)

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Convenient for storage and handling ^{27/}	57.7	32.0	33.3	57.9	42.5
Visible contents (cello-wrapped) . . .	26.9	20.0	27.8	36.8	25.7
Cleaner	15.4	18.0	38.9	5.3	18.6
No odor	--	10.0	--	--	4.4
Miscellaneous reasons	--	20.0	--	--	8.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked ^{28/}	26	50	18	19	113

Do you prefer all your frozen fish packed in a box or just certain kinds?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
All	94.1	92.2	94.6	86.0	92.0
Certain kinds	5.9	7.8	5.4	14.0	8.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	135	103	74	86	398 *

^{27/} Predominantly package.

^{28/} There were 113 respondents who preferred a different type of packaging than that last bought and gave a definite reason for such preference.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

What kinds?

	North- east %	North Central %	South %	West %	U.S. %
Cod	--	12.5	--	--	3.1
Flounder	12.5	--	25.0	--	6.3
Haddock	--	12.5	--	--	3.1
Halibut	12.5	12.5	--	8.3	9.4
Salmon	--	37.5	--	--	9.4
Shrimp	12.5	--	--	--	3.1
Not answered	62.5	25.0	75.0	91.7	65.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked <u>29</u> /	8	8	4	12	32

Why don't you serve frozen fish more often than you do?

	North- east %	North Central %	South %	West %	U.S. %
Use enough now, etc.	66.6	72.9	58.2	55.6	65.6
Prefer fresh fish	16.6	5.5	17.5	25.0	13.6
Other competing foods	5.8	8.2	3.4	5.6	6.0
Not available	2.1	3.9	10.3	9.2	5.5
Price	4.8	3.2	6.8	2.8	4.5
Preparation	2.1	1.0	--	--	1.0
Habit	--	1.6	1.1	--	.9
Health	.3	1.3	1.1	--	.9
Storage space	.3	1.6	.8	--	.9
Odor	.7	.8	.4	--	.6
Miscellaneous	.7	--	.4	1.8	.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers <u>30</u> /	290	385	263	108	1046

29/ Only a limited number of those respondents who specified certain kinds actually named the kind. Since so few were named, care should be exercised in interpreting this data.

30/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason. This item is not related to packaging, but is placed here in sequence with questions on questionnaire.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

Would you look at this list and tell me whether the information on the package about each one is enough or not enough?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Weight of fish:					
Enough	79.2	71.9	76.5	74.3	75.3
Not enough	3.9	11.9	4.4	--	6.3
Not interested	6.8	5.3	2.9	3.0	5.0
Don't know	10.1	10.9	16.2	22.7	13.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Nutritive value (vitamins, etc.):					
Enough	38.3	42.9	41.9	49.7	42.3
Not enough	6.5	15.2	9.5	1.2	9.6
Not interested	19.2	17.8	10.2	9.0	15.2
Don't know	36.0	24.1	38.4	40.1	32.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Whether it is raw or cooked:					
Enough	66.2	62.4	70.1	73.1	66.7
Not enough	4.8	12.1	6.3	.6	7.2
Not interested	7.6	8.6	3.2	1.8	6.1
Don't know	21.4	16.9	20.4	24.5	20.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

Would you look at this list and tell me whether the information on the package about each one is enough or not enough? (Continued)

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Kind of fish:					
Enough	82.0	82.6	86.0	77.8	82.7
Not enough	4.2	5.3	2.5	.6	3.7
Not interested	6.2	5.1	2.5	1.2	4.3
Don't know	7.6	7.0	9.0	20.4	9.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Cut of fish:					
Enough	69.3	70.5	73.7	75.4	71.6
Not enough	7.0	9.5	4.4	1.8	6.6
Not interested	7.6	7.0	3.8	1.2	5.7
Don't know	16.1	13.0	18.1	21.6	16.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Recipes:					
Enough	45.4	44.2	36.2	48.5	43.2
Not enough	14.1	18.0	16.8	2.4	14.6
Not interested	19.7	23.5	20.6	15.0	20.7
Don't know	20.8	14.3	26.4	34.1	21.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

What size package do you prefer?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
1/2 pound	11.3	10.5	19.0	9.0	12.6
1 pound	63.7	62.0	55.2	59.2	60.4
1 1/2 pounds	9.9	13.4	4.1	10.0	9.7
2 pounds	9.3	9.9	15.6	15.0	11.7
Other size	1.4	.9	--	3.6	1.2
Don't know	3.4	1.5	4.4	3.0	2.9
Blank, etc.	1.0	1.8	1.7	.2	1.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

How about the shape of the package?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Long and flat	60.3	60.2	57.8	52.0	58.5
Short and thick	14.9	8.2	16.8	13.8	12.8
Any shape	20.6	.4	2.9	9.0	7.7
Depends on cut	.4	.4	1.0	.6	.5
Miscellaneous	.2	--	--	.6	.3
Blank, etc.	3.6	30.8	21.5	24.0	20.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Particular Preferences - Frozen Fish and Shellfish (Continued)

Grading

Do you think it would be a good idea to have some grading on frozen fish or wouldn't it make any difference to you?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Good idea	65.4	73.2	75.9	77.2	72.2
Bad idea	1.4	.9	--	3.0	1.1
Makes no difference	32.7	24.8	24.1	16.8	25.9
Blank, etc.	.5	1.1	--	3.0	.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Special Products

Do you prefer to buy raw or already cooked frozen shellfish and fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Shellfish:					
Raw	75.2	77.7	63.8	63.2	71.6
Already cooked	21.8	10.8	21.9	27.6	19.0
Blank, etc.	3.0	11.5	14.3	9.2	9.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480
	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fish:					
Raw	79.7	92.1	79.4	71.3	82.9
Already cooked	14.4	4.4	8.9	10.8	9.1
Blank, etc.	5.9	3.5	11.7	17.9	8.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Particular Preferences - Frozen Fish and Shellfish (Continued)

Special Products (Continued)

Have you bought frozen products that were already breaded?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Shellfish:					
Yes	31.6	34.3	38.1	22.4	32.5
No	68.4	54.8	48.6	68.4	59.4
Blank, etc.	--	10.9	13.3	9.2	8.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480
	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fish:					
Yes	11.5	11.2	8.9	10.2	10.6
No	83.9	84.6	79.4	68.3	81.0
Blank, etc.	4.6	4.2	11.7	21.5	8.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Do you like breaded frozen shellfish and fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Shellfish:					
Like	59.2	71.9	82.5	88.9	72.5
Do not	32.7	28.1	15.0	5.5	23.8
Don't know	8.1	--	2.5	5.6	3.7
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked <u>31/</u>	49	57	40	18	164

2/ There were 156 respondents who had bought breaded frozen shellfish and 137 who had bought breaded frozen fish. A few respondents who hadn't bought breaded products were asked these questions also.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Special Products (Continued)

Do you like breaded frozen shellfish and fish? (Continued)

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fish:					
Like	56.9	52.8	45.0	54.5	52.4
Do not	31.4	35.8	27.5	13.6	29.5
Don't know	11.7	11.4	27.5	31.9	18.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked <u>32/</u>	51	53	40	22	166

Do you think you would like a complete frozen (shellfish) (fish) dinner containing the fish, potatoes and vegetables that is packaged in a ready-to-heat container?

	<u>North-</u> <u>east</u> <u>%</u>	<u>North</u> <u>Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Shellfish:					
Would like	20.3	25.9	29.5	22.4	24.6
Wouldn't like	56.4	49.4	29.5	42.1	45.8
Don't know	21.8	13.9	25.7	27.6	20.8
Blank, etc.	1.5	10.8	15.3	7.9	8.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	133	166	105	76	480

32/ There were 156 respondents who had bought breaded frozen shellfish and 137 who had bought breaded frozen fish. A few respondents who hadn't bought breaded products were asked these questions also.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Special Products (Continued)

Do you think you would like a complete frozen (shellfish) (fish) dinner containing the fish, potatoes and vegetables that is packaged in a ready-to-heat container? (Continued)

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Fish:					
Would like	21.7	20.9	25.1	15.6	21.4
Wouldn't like	54.4	62.6	38.1	41.9	51.7
Don't know	19.2	13.4	28.9	23.4	20.0
Blank, etc.	4.7	3.1	7.9	19.1	6.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	355	455	315	167	1292

Mail Order 33/

Do you ever get frozen fish or shellfish by mail order?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	1.1	6.6	.9	--	2.4
No	98.9	93.4	99.1	100.0	97.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	93	182	338	55	668

33/ In rural farm and non-farm areas only.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Mail Order (Continued)

Did you receive the frozen fish in satisfactory condition? (Asked only of those who have received frozen fish and shellfish by mail order.)

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	100.0	100.0	--	--	81.3
No	--	--	--	--	--
No answer	--	--	100.0	--	18.7
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked <u>34/</u>	1	12	3	--	16

Are there any improvements you could suggest in the sale of frozen fish and shellfish by mail order?

Data insufficient - not analyzed.

Is there any particular reason why you never purchased frozen fish or shellfish by mail?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Never heard of frozen fish by mail order	31.5	11.2	11.9	27.3	15.8
Convenient stores	23.9	8.8	7.5	16.4	10.9
Not available	6.5	4.7	13.1	--	8.9
Don't like idea	13.0	7.6	7.2	7.3	8.1
Too large quantity	2.2	12.4	.6	--	3.8
Fresh fish available	--	--	1.8	--	.9
Freeze own fish	--	1.2	--	5.5	.8
Bad experience	--	1.8	--	--	.5
Price	1.1	--	.3	--	.3
No storage space	--	1.2	--	--	.3
Afraid of spoilage	2.2	--	--	--	.3
Supply of meat at home	--	--	.3	--	.1
Blank, etc.	19.6	51.1	57.3	43.5	49.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	92	170	335	55	652

34/ Care should be taken in interpreting this data because of the small number of replies analyzed.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Mail Order (Continued)

If mail order were available, would you purchase it by mail?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Yes	4.0	14.5	16.7	20.0	13.4
No	74.0	72.7	57.1	25.0	62.2
Don't know	22.0	12.8	26.2	55.0	24.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked <u>35/</u>	50	55	84	20	209

Classification Data

Who in family decides whether or not to serve fish?

	<u>North- east</u> <u>%</u>	<u>North Central</u> <u>%</u>	<u>South</u> <u>%</u>	<u>West</u> <u>%</u>	<u>U.S.</u> <u>%</u>
Housewife	83.4	77.6	69.6	72.7	76.2
Husband	3.2	7.2	8.6	7.5	6.6
Family	5.5	7.8	8.6	11.2	7.8 *
Other female member in household . .	.9	1.2	1.9	1.2	1.3
Other male member in household . .	.1	.5	.6	--	.4
Blank, etc.	6.9	5.7	10.7	7.4	7.7 *
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	685	732	734	322	2473

35/ A number of respondents were asked this question who gave no answer to item 50 in the questionnaire. Exercise care with this data.

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Classification Data (Continued)

How many people are there living in your household altogether, counting children and babies and any relatives or other adults including roomers or boarders?

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
Adults	1822	1811	1878	742	6253
Children	561	736	827	406	2530
Totals	<u>2383</u>	<u>2547</u>	<u>2705</u>	<u>1148</u>	<u>8783</u>
	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>

Age

Under 5 years of age	179	279	222	99	779 *
5-14	326	432	487	225	1470 *
15-19	151	146	234	75	606 *
20-24	106	139	195	22	462 *
25-34	367	351	363	159	1240 *
35-44	365	391	397	160	1313 *
45-54	356	303	320	105	1084 *
55-64	197	192	204	86	679 *
65 and over	158	219	184	94	655 *
Age not indicated	178	95	99	123	495 *
Totals	<u>2383</u>	<u>2547</u>	<u>2705</u>	<u>1148</u>	<u>8783</u>
	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>

Position in Household

Grandfather	21	21	23	8	73
Grandmother	28	24	32	8	92
Husband	594	633	608	259	2094 *
Wife	666	711	712	309	2398
Son	430	508	574	220	1732
Daughter	424	486	523	213	1646
Brother	22	19	13	8	62
Sister	39	26	14	2	81
Roomer	23	32	35	9	99
Other, blank, not given, etc. . .	136	87	171	112	506 *
Totals.	<u>2383</u>	<u>2547</u>	<u>2705</u>	<u>1148</u>	<u>8783</u>

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Classification Data (Continued)

Do roomers or boarders eat in or out?

Data insufficient - not analyzed.

What kind of work does the head of your household do?

	<u>North- east</u>	<u>North Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>
	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
Professional and semi-professional	55	53	35	14	157
Farmers, farm laborers	32	103	202	38	375
Proprietors, managers, officials	74	60	53	27	214*
Clerical and kindred workers	64	54	48	19	185
Salesmen	35	27	28	15	105*
Craftsmen, foremen	142	152	92	38	424*
Operatives, service workers	127	142	118	61	448*
Domestic service	2	--	3	1	6
Housework	7	14	12	7	40
Laborers	44	32	44	19	139*
Services (Armed forces)	8	5	5	6	24
Retired	51	68	50	60	229*
Refused, blanks, etc.	44	22	44	17	127*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

The approximate income of your whole family. 36/

	<u>North- east</u>	<u>North Central</u>	<u>South</u>	<u>West</u>	<u>U.S.</u>
	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
Under \$500 a year	--	8	31	6	45
\$500 - \$749	2	4	14	1	21*
750 - 999	1	4	27	1	33*
1000 - 1249	6	11	20	7	44*
1250 - 1499	14	15	39	7	75*
1500 - 1999	23	10	28	11	72*
2000 - 2499	51	35	51	23	160*
2500 - 2999	91	82	78	36	287*
3000 - 3999	139	142	67	32	380*
4000 - 4999	78	75	40	22	215*
5000 - 7499	41	47	29	15	132*
7500 - over	27	17	12	9	65
Refused or blank, etc.	212	282	298	152	944*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

36/ Adjusted to before taxes.

Classification Data (Continued)

Age of respondents:

	<u>North- east</u> <u>No.</u>	<u>North Central</u> <u>No.</u>	<u>South</u> <u>No.</u>	<u>West</u> <u>No.</u>	<u>U.S.</u> <u>No.</u>
15 - 19	2	9	11	4	26
20 - 24	16	36	51	18	121
25 - 34	159	159	147	73	538
35 - 44	171	178	171	82	602
45 - 54	174	143	157	52	526
55 - 64	96	93	115	41	345
65 and over	57	94	66	51	268
Blank, etc.	10	20	16	1	47
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

Color:

	<u>North- east</u> <u>No.</u>	<u>North Central</u> <u>No.</u>	<u>South</u> <u>No.</u>	<u>West</u> <u>No.</u>	<u>U.S.</u> <u>No.</u>
White	643	686	594	306	2229*
Negro	32	44	128	12	216
Other non-white	3	1	6	2	12
Blank, etc.	7	1	6	2	16*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

Farm, non-farm:

	<u>North- east</u> <u>No.</u>	<u>North Central</u> <u>No.</u>	<u>South</u> <u>No.</u>	<u>West</u> <u>No.</u>	<u>U.S.</u> <u>No.</u>
Farm	65	150	282	52	549*
Non-farm	609	578	449	259	1895*
Blank, etc.	11	4	3	11	29*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Classification Data (Continued)

City size:

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
500,000 and over	195	157	96	68	516
50,000 - 499,999	141	109	72	84	406
2,500 - 49,999	207	228	114	71	620
Remainder	142	238	452	99	931
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

In rural areas:

Do you (or does your family) raise most of the food you use or do you (or your family) buy most of it?

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
Raise	28	96	193	12	329*
Buy	29	41	65	16	151*
Can't say	8	13	24	24	69*
Totals	<u>65</u>	<u>150</u>	<u>282</u>	<u>52</u>	<u>549*</u>

Do you have any income from work off the farm not included in the above income?

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
Yes	10	11	40	10	71*
No	34	103	176	21	334*
No answer, blank, etc.	21	36	66	21	144*
Totals	<u>65</u>	<u>150</u>	<u>282</u>	<u>52</u>	<u>549*</u>

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

Classification Data (Continued)

What was the last grade you completed in school?

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
0 - 4 years	30	21	76	24	151
5 years	14	13	52	8	87
6 years	44	18	47	13	122
7 years	32	26	59	24	141
8 grade school	131	191	127	55	504*
9	37	55	40	14	146
10	42	55	55	24	176
11	25	45	42	13	125
12 high school	199	200	139	87	625*
13 - 15 college	59	63	52	25	199*
16	27	28	25	23	103
over 16	6	4	6	4	20
Blanks, etc.	39	13	14	8	74*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

In what country were your parents born?

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
United States	353	518	626	208	1705
One or both parents foreign born .	332	214	108	114	768
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

Religion:

	<u>North- east No.</u>	<u>North Central No.</u>	<u>South No.</u>	<u>West No.</u>	<u>U.S. No.</u>
Catholic	330	191	89	107	717*
Protestant	292	508	637	193	1630
Jewish	52	22	2	15	91
Blanks, etc.	11	11	6	7	35*
Totals	<u>685</u>	<u>732</u>	<u>734</u>	<u>322</u>	<u>2473</u>

* Revision of figure shown in Fishery Leaflet 407, Fish and Shellfish Preferences of Household Consumers - 1951, Part I - National Summary.

A P P E N D I X

FISH AND SHELLFISH QUESTIONNAIRE

Family Name Location number

Street Address Apt.

City or Town Date of Interview

RESULTS OF CALLS AT HOUSEHOLD

	1st Call	2nd Call	3rd Call
HOUSEWIFE HOME			
NOT HOME			
REFUSAL			

38-

39-

40-

41-

We are making a survey of certain foods and I would like your opinion about them and, in some cases your ideas for improvement.

1. First I'd like to ask: Does your family generally eat its main meal at home or somewhere else?

At home
(Skip to Q. 3)

Somewhere else

2. (If "Somewhere else") About how often do you cook dinner at home?

More than once a week Less than once a week

(IF LESS THAN ONCE A WEEK, DISCONTINUE INTERVIEW)

42-1

3. Do you do the cooking for the family?

Yes 43-1 No 2

4. Do you do the food buying for the family?

Yes 44-1 No 2

(IF "NO" TO QUESTION 3 AND 4 DISCONTINUE INTERVIEW)

FISH AND SHELLFISH QUESTIONNAIRE (CONTINUED)

As you probably know, there are various ways that fish and shellfish can be bought nowadays—That is, they can be bought both frozen and fresh as well as canned or smoked. Now I'd like to ask you first: (Interviewer: Start at arrow → on left side of page.)

Interviewer: Ask section a for all types then return and ask across for each type	a Have you ever eaten this during the past year?	b (If "yes" to a) When was the last time you ate this? (Ask about type, that is, frozen shellfish, fresh shellfish, etc.)	c Is there any particular season that you serve it more often? (Interviewer: If "yes," ask: "What season?")	d (If "yes" to c) How often do you serve this season? (Indicate whether week, month, etc.)	e Is there a particular day of the week that you serve it? Interviewer: (If "yes," ask: "What day?")	f What do you particularly like about this type? (Ask about shellfish, fresh shellfish, etc.)	g Can you generally get this kind of (Ask of type) you want?	h What is the kind you usually serve in this group? (Ask about type)
5. About frozen shellfish? That is, shrimp, lobster, crabmeat, etc.	Yes ... 45-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 46-	Summer ... 47-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 48-	Mon. ... 49-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	 50- 51-	Yes ... 52-1 No ... 2 Don't know ... 3	No particular kind 53- 54-
6. How about fresh shellfish?	Yes ... 55-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 56-	Summer ... 57-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 58-	Mon. ... 59-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 60- 61-	Yes ... 62-1 No ... 2 Don't know ... 3	No particular kind 63- 64-
7. And canned shellfish — shrimp, lobster, crabmeat, etc.	Yes ... 65-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 56-	Summer ... 57-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 58-	Mon. ... 59-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 60- 61-	Yes ... 62-1 No ... 2 Don't know ... 3	No particular kind 63- 64-
8. How about frozen fish? That is, salmon, flounder, sole, etc.	Yes ... 68-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 69-	Summer ... 70-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 71-	Mon. ... 72-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 73- 74- 75-	Yes ... 76-1 No ... 2 Don't know ... 3	No particular kind 77- 78- 79-
9. Fresh fish	Yes ... 43-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 44-	Summer ... 45-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 46-	Mon. ... 47-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 48- 49- 50-	Yes ... 51-1 No ... 2 Don't know ... 3	No particular kind 52- 53- 54-
10. Canned fish	Yes ... 55-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 44-	Summer ... 45-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 46-	Mon. ... 47-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 48- 49- 50-	Yes ... 51-1 No ... 2 Don't know ... 3	No particular kind 52- 53- 54-
11. Cured fish — pickled, salted, smoked, etc.	Yes ... 59-1 No ... 2 Don't know ... 3	... days ago ... weeks ago ... months ago ... don't remember 44-	Summer ... 45-1 Winter ... 3 Fall ... 2 Spring ... 4 No particular season ... 5	... times per week, month, etc. 46-	Mon. ... 47-1 Fri. ... 5 Tues. ... 2 Sat. ... 6 Wed. ... 3 Sun. ... 7 Thurs. ... 4 No particular day ... 8	... 48- 49- 50-	Yes ... 51-1 No ... 2 Don't know ... 3	No particular kind 52- 53- 54-

FISH AND SHELLFISH QUESTIONNAIRE (CONTINUED)

ASK EVERYONE WHO SERVED SOME TYPE OF FISH; THAT IS, ANY "YES" IN COLUMN a. IF RESPONDENT DID NOT, GO TO CLASSIFICATION DATA.

12. If it cost you the same amount to serve your family fresh fish or frozen fish, which would you prefer?
Fresh fish.....63-1 Frozen fish.....2 No preference.....3
(Skip to Q. 14)

13. (If "fresh" or "frozen") What would you say is the main advantage of serving.....fish?
("fresh" or "frozen")
.....64-
.....65-
(Write in)

14. Is there anyone in your family who will eat fresh fish but will not eat frozen fish?
Yes.....66-1 No.....2 Don't know.....3
(Skip to Q. 16)

15. (If "Yes") How many are children under 15 and how many are adults that will not eat it?
Adults.....67-
Children under 15.....68-

16. Generally speaking, do you think people serve fish more often when meats go up in price or not?
Yes.....69-1 No.....2 Don't know.....3

17. (Interviewer: Ask this question only of those who did not serve frozen fish in past year; that is, "No" in Question 8a) Is there any particular reason why you don't use frozen fish?
Price..... Taste..... Availability.....
Other.....70-
.....71-
.....72-
(Write in)

18. (Ask only if both fresh shellfish and frozen shellfish are served; that is "Yes" in 5a or 6a). Which do you use more often—fresh or frozen shellfish?
Fresh shellfish.....73-1 Frozen shellfish.....2 About the same.....3

19. (Ask only if both fresh fish and frozen fish are served; that is "Yes" in 8a and 9a). Which do you use more often—fresh or frozen fish?
Fresh fish.....74-1 Frozen fish.....2 About the same.....3

Interviewer: Ask Questions 20 through 42 of those respondents who serve frozen fish: ("Yes" in Q. 8a)

20. How about frozen fish—do you think people buy frozen fish more often when meat prices go up than they ordinarily do or not?
Yes.....43-1 No.....2 Don't know.....3
42-3

21. What methods of cooking frozen fish do you usually use—that is, frying, baking, broiling, boiling, or any other way?
Frying..... { Flame }
Baking..... { Electric }
Boiling..... { Out doors }
Other.....44-
.....45-
.....46-
(Write in)

22. In your experience with frozen fish have you found the quality to be generally the same or does it change from time to time?
Changes.....47-1 Generally the same.....2 No opinion.....3
(Skip to Q. 24)

23. (If "Changes") In what way have you found the quality to change?
.....48-
.....49-
(Write in)

24. Will you look at this card and tell me what cuts of frozen fish you prefer to buy?
(Interviewer: Hand respondent card and record by number)
1. Whole or round fish..... 4. Pan-dressed fish.....
2. Drawn fish..... 5. Steaks.....
3. Dressed fish..... 6. Fillets.....50-
.....None in particular.....51-
.....52-

25. The last time you bought frozen fish, which of these cuts did you buy?
.....53-
.....54-
(Write in)

25a. Do you prefer fillets with the skin on or skinned?
Skin on.....55-1 Skinless.....2 No preference.....3

26. Have you ever tried frozen Fillet of Flounder or Fillet of Sole?
Yes.....56-1 No.....2 Don't remember.....3
(Skip to Q. 29)

27. (If "Yes") In some sections of the country you can get both East Coast and West Coast Fillet of Flounder and Fillet of Sole. Do you happen to know whether you ever tried East Coast Fillet of Sole or Flounder, or West Coast Fillet of Sole or Flounder?
Tried East Coast Fillet of Sole or Flounder.....57-1
Tried West Coast Fillet of Sole or Flounder.....3
Tried both.....2 Don't know.....4
(Skip to Q. 29)

28. (If respondent has tried both) Which do you like better, East Coast Fillet or West Coast Fillet of Sole or Flounder?
Like East Coast Fillet.....58-1 Like West Coast Fillet.....2
No preference.....3

29. About how much frozen fish do you buy for each serving—that is, about how much of a pound do you count on for each member of the family?
.....Per person 59-
(Record in pounds per person)

30. At what type of store did you last buy frozen fish?
Fish store.....60-1 Other.....(Write in)
Super market.....2

31. Can you get frozen fish at the place where you do most of your food shopping?
Yes.....61-1 No.....2 Don't know.....3
(Skip to Q. 34)

32. (If "Yes") Can you generally get any kind you want at this store?
Yes.....62-1 No.....2 Don't know.....3

33. Is there anything you dislike about the way frozen fish is kept in this store?
.....63-
.....64-
.....65-
(Write in)

34. The last time you bought frozen fish, was it unwrapped, wrapped only in cellophane, packed in a box or some other type of package?
Unwrapped.....66-1 Packed in box.....3
Wrapped only in cellophane.....2 Other.....(Write in)

35. How did it happen you bought this type instead of another?
.....67-
.....68-
(Write in)

36. Do you prefer to buy your frozen fish unwrapped, wrapped only in cellophane, packed in a box or some other type package?
Unwrapped.....69-1 Packed in box.....3
Wrapped only in cellophane.....2 Other.....(Write in)

37. (Ask only if answer to question 36 is different from question 34) Why do you prefer this type?
.....70-
.....71-
(Write in)

38. (If the answer to question 34 or 36 is "packed in a box," ask:) Do you prefer all your frozen fish packed in a box or just certain kinds?
All.....72-1 Certain kinds.....2

38a. (If "Certain kinds") ask: What kinds?
.....73-
.....74-
.....75-
(Write in)

38b. Why don't you serve frozen fish more often than you do?
.....76-
.....77-
.....78-
(Write in)

FISH AND SHELLFISH QUESTIONNAIRE (CONTINUED)

39. Now I'd like to ask you a few last questions about your opinion of the packaging of frozen fish. Generally on the outside label of frozen food packages there are various instructions and information about the contents of the package. Would you look at this list and tell me whether the information on the package about each one is enough or not enough?

42-4		Not Not inter- Don't			
		Enough	enough	ested	know
a.	Weight of fish	43-1	2	3	4
b.	Nutritive value (vitamins, etc.)	44-1	2	3	4
c.	Whether it is raw or cooked	45-1	2	3	4
d.	Kind of fish	46-1	2	3	4
e.	Cut of fish	47-1	2	3	4
f.	Recipes	48-1	2	3	4

40. As you probably know, all meats are graded so that when you buy them in a butcher store you can tell by the label on it whether it's top grade, medium etc. Do you think it would be a good idea to have some grading on frozen fish, or wouldn't it make any difference to you?

Good idea 49-1 Bad idea 2 Makes no difference 3

41. What size package do you prefer—that is, do you prefer the 1/2 pound size, the one pound size, the 1 1/2 pound size, or the two pound size?

1/2 lb. size 50-1 2 lb. size 4
1 lb. size 2 Other 5
1 1/2 lb. size 3 Don't know 6

42. How about the shape of the package? Do you prefer it long and flat, short and thick, or do you prefer some other shape?

Long and flat 51-1 Short and Thick 2

Other

(Write in)

Interviewer: Ask respondents who serve either frozen shellfish or frozen fish. Record answers separately for each.

		Frozen	
		shellfish	fish
43. Do you prefer to buy raw or already cooked frozen (shellfish) (fish)?	Raw	52-1	56-1
	Already-cooked	2	2
44. Have you bought frozen (shellfish) (fish) products that were already breaded?	Yes	53-1	57-1
	No	2	2
45. (If "Yes" to quest. 44) Do you like breaded frozen (shellfish) (fish)?	Like	54-1	58-1
	Do not	2	2
	Don't know	3	3
46. Do you think you would like a complete frozen (shellfish) (fish) dinner containing the fish, potatoes and vegetables that is packaged in a ready-to-heat container?	Would like	55-1	59-1
	Wouldn't like	2	2
	Don't know	3	3

ASK ONLY IN RURAL AREAS

47. Do you ever get frozen fish or shellfish by mail order?

Yes 60-1 No 2
(Skip to Q. 50)

48. (If "Yes") Did you receive the frozen fish in satisfactory condition?

Yes 61-1 No 2

49. Are there any improvements you could suggest in the sale of frozen fish and shellfish by mail order?

62-
(Write in) 63-
None

50. (If "No" to Q. 47) Is there any particular reason why you never purchased frozen fish or shellfish by mail?

64-
(Write in) 65-
None

51. (If answer to question 50 is "not available," "no mail order here," etc.,) ask: If mail order were available, would you purchase it by mail?

Yes 66-1 No 2 Don't know 3

ASK OF EVERYONE

52. Who in the family decides whether or not to serve fish?

(Write in)

67-

CLASSIFICATION DATA

A. How many people are there living in your household altogether, counting children and babies and any relatives or other adults including roomers or boarders?

1-
Number 2-

B. What is the approximate age of each person and position in household (mother, father, daughter, son, roomer, boarder, etc.)?

Age	Position in household	Age	Position in household
a. 3-	4-	f. 13-	14-
b. 5-	6-	g. 15-	16-
c. 7-	8-	h. 17-	18-
d. 9-	10-	i. 19-	20-
e. 11-	12-	j. 21-	22-

INTERVIEWER ASK: 1. Are there any children under one year of age in this household?
(Record above if not already listed)

2. Do roomers or boarders eat in or out?

In 23-1 Out 2

C. What kind of work does the head of your household do?

24-
(Kind of work, not kind of business)

D. In which of these letter groups does the approximate income of your whole family fall? (Hand respondent card)

a b c d e f g h i j k l 25-
Don't know or refused 26-

E. Is this before or after deduction for income tax, social security, etc.?

Before 27-1 After 2 Don't know 3

ASK E-1 AND E-2 ON FARMS

1. Do you (or does your family) raise most of the food you use or do you (or your family) buy most of it?

Raise 28-1 Buy 2 Can't say 3

2. Do you have any income from work off the farm not included in the above income?

Yes 29-1 No 2

F. What was the name of the last school you attended (or the school you are now attending)?

G. What was the last grade you completed in school?
(Interviewer: Record last grade completed)

0-4 years	30-1	9 years	6
5 years	2	10 years	7
6 years	3	11 years	8
7 years	4	12 (through high school)	9
8 (through grade school)	5	13-15 years	0
		16 (through college)	X
		Over 16	Y

H. In what country were your parents born? (Write in) 31-

I. (Ask or estimate) Religion:

Catholic 32-1 Protestant 2 Jewish 3

Other

(Write in)

AUTOMATIC CLASSIFICATION

J. Age of respondents	K. Color
15 - 19	33-1 White 34-1
20 - 24	2 Negro 2
25 - 34	3 Other Non-White 3
35 - 44	4
45 - 54	5 L. Farm, non-farm
55 - 64	6 Farm 35-1
65 and over	7 Non-farm 2

GENERAL COMMENTS:

36-

37-

